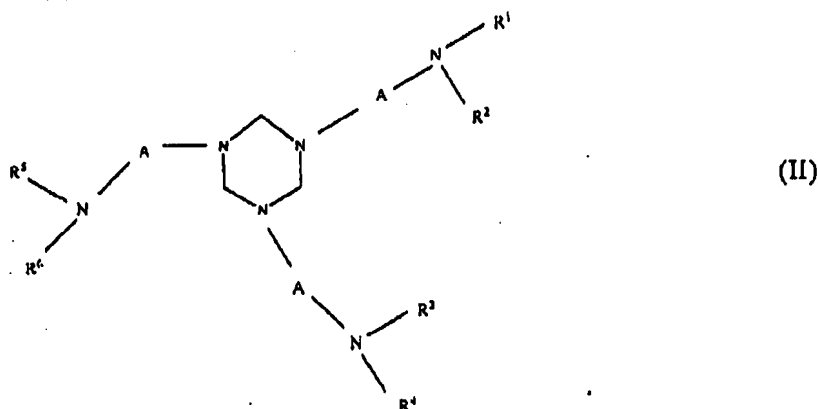


OK to enter

In the Claims:

1. (Currently amended.) A process method for scavenging hydrogen sulfide and/or mercaptans from a liquid or gaseous stream which comprises bringing the stream into contact with a scavenging effective amount of at least one scavenger selected from the group consisting of:

(i.) a 1,3,5-trisalkanylamino hexahydro-1,3,5-triazine derivative of the formula:



wherein each A is independently selected from the formula $-(CHR^7)_x$ wherein x is from 1 to about 6 and each R^1 , R^2 , R^3 , R^4 , R^5 , R^6 and R^7 is independently selected from -H or a C_1-C_6 alkyl;

(ii.) a nitrogen heterocyclic compound of the formula: e



wherein Y is -N or -O and R^8 is an aminoalkyl group containing between 2 to 4 carbon atoms; 2-aminoethyl or 2-hydroxyethyl; and

(iii.) an amine oxide of the formula $(RCONHCH_2CH_2CH_2)(CH_3)_2N \rightarrow O$ wherein R is a radical selected from the group consisting of decyl, cocoyl, lauryl, cetyl and oleyl oxide; and

~~(iv.) an aliphatic or aromatic polyamine~~

and thereby scavenging hydrogen sulfide and/or mercaptan from the liquid or gaseous stream.

2. (Currently amended.) The ~~process~~ method of Claim 1, wherein the at least one scavenger is the 1,3,5-trisalkanylamino hexahydro-1,3,5-triazine derivative.

3. (Currently amended.) The ~~process~~ method of Claim 2, wherein the 1,3,5-trisalkanylamino hexahydro-1,3,5-triazine derivative is 1,3,5-tris[3-(dimethylamino)propyl] hexahydro-1,3,5-triazine, 1,3,5-tris[2-(dimethylamino)ethyl] hexahydro-1,3,5-triazine, 1,3,5-tris[3-(diethylamino)propyl] hexahydro-1,3,5-triazine or 1,3,5-tris[2-(diethylamino)ethyl] hexahydro-1,3,5-triazine.

4. (Currently amended.) The ~~process~~ method of Claim 25 1, wherein the at least one scavenger comprises the nitrogen heterocyclic compound of (ii) ~~wherein the aminoalkyl group is 2-aminoethyl or 2-hydroxyethyl.~~

5. (Cancelled.)

6. (Cancelled.)

7. (Currently amended.) The ~~process~~ method of Claim 6 1, wherein the at least one scavenger is an amine oxide is of the formula (iii). $(RCONHCH_2CH_2CH_2)(CH_3)_2N \rightarrow O$ ~~wherein R is a radical selected from the group consisting of decyl, cocoyl, lauryl, cetyl and oleyl.~~

8. (Cancelled.)

9. (Cancelled.)

10. (Cancelled.)

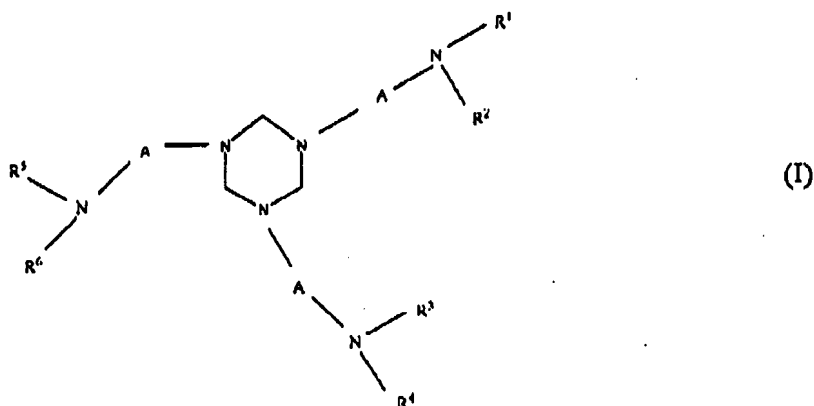
11. (Cancelled.)

12. (Cancelled.)

13. (Cancelled.)

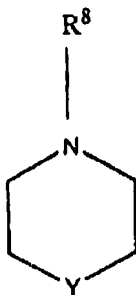
14. (Currently amended.) A ~~process~~ method for scavenging hydrogen sulfide and/or mercaptan contaminants from a hydrocarbon stream, comprising mixing the hydrocarbon stream with a scavenging effective amount of at least one scavenger selected from the group consisting of a:

(i.) 1,3,5-trisalkanylamino hexahydro-1,3,5-triazine derivative of the formula:



wherein each A is independently selected from the formula $-(CHR^7)_x$ wherein x is from 1 to about 6 and each R^1 , R^2 , R^3 , R^4 , R^5 , R^6 and R^7 is independently selected from -H or a C_1 - C_6 alkyl;

(ii.) nitrogen heterocyclic compound of the formula:



(II)

wherein Y is -N or -O and R^8 is an aminoalkyl group containing between 2 to 4 carbon atoms 2-aminoethyl or 2-hydroxyethyl; and

(iii.) amine oxide of the formula $(R_1)(R_2)(R_3)N \rightarrow O$ wherein R_1 is an alkyl, alkenyl, alkylarylalkylene, ~~alkenylarylalkylene, alkylaminoalkylene, alkenylaminoalkylene, alkylamidoalkylene, or alkenylamidoalkylene group~~, wherein each of said alkyl groups contains up to about 24 carbon atoms and may be branched or straight chained and saturated or unsaturated, and wherein said alkylene groups have from about 1 to about 6 carbon atoms, and R_2 and R_3 are independently aliphatic chains having about 1 to about 30 carbon atoms; and $(RCONHCH_2CH_2CH_2)(CH_3)_2N \rightarrow O$ wherein R is a radical selected from the group consisting of decyl, cocoyl, lauryl, cetyl and oleyl

(iv.) ~~aliphatic or aromatic polyamine~~

and thereby scavenging hydrogen sulfide and/or mercaptan contaminants from the hydrocarbon stream.

15. (Currently amended.) The ~~process~~ method of Claim 14, wherein the at least one scavenger comprises a 1,3,5-trisalkanylamino hexahydro-1,3,5-triazine derivative selected from the group consisting of 1,3,5-tris[3-(dimethylamino)propyl] hexahydro-1,3,5-triazine, 1,3,5-tris[2-(dimethylamino)ethyl] hexahydro-1,3,5-triazine, 1,3,5-tris[3-(diethylamino)propyl] hexahydro-1,3,5-triazine and 1,3,5-tris[2-(diethylamino)ethyl] hexahydro-1,3,5-triazine.

16. (Currently amended.) The ~~process~~ method of Claim 14, wherein the at least one scavenger comprises an ~~at least one~~ amine oxide of the formula:



wherein R is a radical selected from the group consisting of decyl, cocoyl, lauryl, cetyl and oleyl
formula (iii).

17. (Cancelled.)

18. (Cancelled.)

19. (Cancelled.)

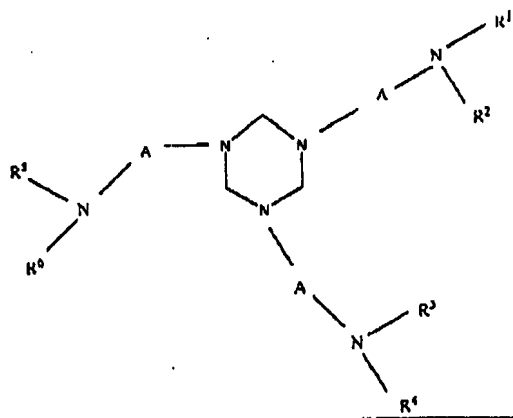
20. (Cancelled.)

21. (Cancelled.)

22. (Currently amended.) The process method of Claim 21, wherein the liquid or gaseous stream is selected from the group consisting of liquefied petroleum gas, crude oil, petroleum residual oil and heating oil.

23. (Currently amended.) A process method for scavenging hydrogen sulfide and/or mercaptans from a liquid stream which comprises bringing the stream into contact with a scavenging effective amount of at least one scavenger selected from the group consisting of a:

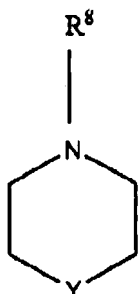
(i.) 1,3,5-trisalkanylamino hexahydro-1,3,5-triazine ~~derivative~~; derivative of the formula:



(II)

wherein each A is independently selected from the formula $-(CHR^7)_x$ wherein x is from 1 to about 6 and each $R^1, R^2, R^3, R^4, R^5, R^6$ and R^7 is independently selected from $-H$ or a C_1-C_6 alkyl;

(ii.) a nitrogen heterocyclic compound of the formula:



(I)

wherein Y is $-N$ or $-O$ and R^8 is an aminoalkyl group containing between 2 to 4 carbon atoms; is 2-aminoethyl or 2-hydroxyethyl; and

(iii.) an amine oxide; oxide of the formula $(RCONHCH_2CH_2CH_2)(CH_3)_2N \rightarrow O$ wherein R is a radical selected from the group consisting of decyl, cocoyl, lauryl, cetyl and oleyl

(iv.) alkanolamine; or

(v.) aliphatic or aromatic polyamine

and thereby scavenging hydrogen sulfide and/or mercaptans from the liquid or gaseous stream wherein the scavenger is added neat or diluted with a solvent selected from the group consisting of alcohols, esters, benzene, benzene derivatives, acetone, kerosene and aromatic naphtha.

24. (Cancelled.)
25. (Cancelled.)
26. (New.) The method of Claim 4, wherein R¹ is 2-aminoethyl.
27. (New.) The method of Claim 4, wherein R¹ is 2-hydroxyethyl.
28. (New.) The method of Claim 14, wherein the hydrocarbon is selected from the group consisting of liquefied petroleum gas, crude oil, petroleum residual oil and heating oil.
29. (New.) The method of Claim 14, wherein the at least one scavenger comprises the nitrogen heterocyclic compound of (ii).
30. (New.) The method of Claim 1, wherein the method is conducted at a temperature between from about 40°C to about 150°C.
31. (New.) The method of Claim 30, wherein the method is conducted at a temperature of about 85°C to 120°C.
32. (New.) The method of Claim 1, wherein the liquid or gaseous stream is a wet or dry gaseous mixture of hydrogen sulfide and/or mercaptan and hydrocarbon vapors.
33. (New.) The method of Claim 1, wherein the at least one scavenger is vaporized and then introduced as a gas to the liquid or gaseous stream.